

WE CLAIM:

1. A printhead assembly which comprises
an elongate support structure; and
5 at least one elongate printhead module positioned on the support structure, along a
length of the support structure, the, or each, printhead module comprising
an elongate elastomeric feed member that is positioned on the support
structure, the feed member defining a number of longitudinally extending flow
passages that are connectable to at least an ink supply, and a plurality of outlet holes
10 in a surface of the feed member in fluid communication with the flow passages;
an ink distribution assembly that is positioned on the feed member, the ink
distribution assembly defining a mounting formation to permit a printhead chip to
be mounted on the ink delivery assembly, a plurality of ink inlets that are in fluid
communication with the outlet holes of the feed member, a plurality of exit holes
15 and tortuous ink flow paths from each ink inlet to a number of respective exit holes;
and
a printhead chip that is mounted on the ink distribution assembly so that the
ink can be fed from the exit holes to the printhead chip.
- 20 2. A printhead assembly as claimed in claim 1, which includes a number of elongate
printhead modules that are mounted, end-to-end, on the support structure.
3. A printhead assembly as claimed in claim 2, in which each feed member is an
extruded member having a generally rectangular cross section, with the ink flow paths
25 extending from one end of the feed member to an opposite end, each printhead module
including two closures that are engageable with respective ends of the feed member and the
feed member defining a number of inlet openings in the surface of the ink feed member,
each inlet opening being in fluid communication with a respective flow path to permit at
least ink to be delivered to the flow paths.
- 30 4. A printhead assembly as claimed in claim 3, in which a delivery structure is
mounted on each ink feed member, each delivery structure defining a number of inlet
conduits in fluid communication with respective delivery outlets, the delivery structure

being engageable with the feed member such that each delivery outlet is in fluid communication with a respective ink flow path, via one of the inlet openings of the feed member.

- 5 5. A printhead assembly as claimed in claim 4, in which the delivery structure includes a connecting plate and a plurality of connectors that are arranged on the connecting plate, each connector defining a respective delivery outlet and being engageable with a respective conduit, the connectors being configured to engage the feed member at respective inlet openings.

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6. A printhead assembly as claimed in claim 5, in which each printhead module includes an end cap assembly which includes a fastening plate, one of the closures and the connecting plate, the closure being interposed between and pivotally mounted to the connecting plate and the fastening plate and the connecting plate being fastenable to the fastening plate so that an end portion of the feed member is sandwiched between the connecting and fastening plates.

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7. A printhead assembly as claimed in claim 3, in which the outlet holes and the inlet holes of each ink feed member are the product of a laser ablation process carried out on the surface of the ink feed member.

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